



Ministry of Agriculture
Republic of Latvia

Designing interventions within the CAP green architecture

**Seminar on CAP Strategic Planning
December 4, 2019**

Impact on natural resources



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- Use of fertilizers
- N un P runoffs (t/g or kg/ha)

Water



- Organic matter in soil
- Soil reaction
- Content of P and K

Soil



- Ammonia emissions
- Manure management

Air



- Land use, management
- Diversity of landscape, elements
- Status of biotopes and habitats

Biodiversity



- GHG emissions
- Land use, management
- Animal husbandry

Climate



Agricultural activity

Food, jobs, agro-tourism...

Measures included in Nat. energy and climate plan 2021-2030		Measures included in «Clean air» action plan 2019-2030
Precision mineral fertiliser application		
Fertilisation planning		
Nitrogen fixing crops as a part of crop rotation		
Facilitation of biogas production		
Direct injection of slurry in soil		
Organic dairy farming (emissions reducing dairy farming)		
Planning feed rations		
Enhancement of the quality of feed		
AGRI LULUCF	Maintenance of drainage systems	Reduced time limits for manure incorporation
	Establishment of orchards	Covering of slurry storage facilities
	Undersowing grass	Replacement of lagoons with cylindrical manure storages
	Green fallow	
FOREST LULUCF	Afforestation	
	Replacement/maintenance of non-productive forest stands	
	Regeneration of stands affected by natural disturbances	
	Forest thinning	
	Recultiv. of historic peat-extraction sites, introducing perennial crops	



Needs identified together with stakeholders

- Implementation of measures reducing **GHG emissions** (or stimulating sequestration);
- Improving of **soil «quality»** indicators;
- Improving of **water quality** indicators;
- Improving of **air quality** indicators (reducing ammonia emissions);
- Improving of **biodiversity** indicators, preservation of landscape elements;
- Improving of **biodiversity** indicators in **forest lands**;
- Practices of **animal welfare** contributing to climate/environmental objectives;
- Strengthening knowledge / level of understanding.



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Criteria for selection of interventions

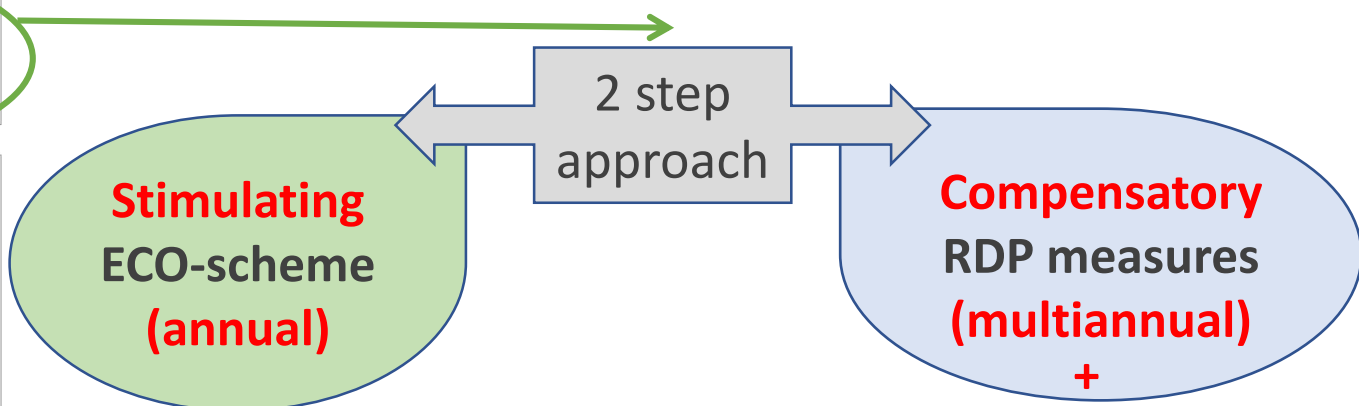
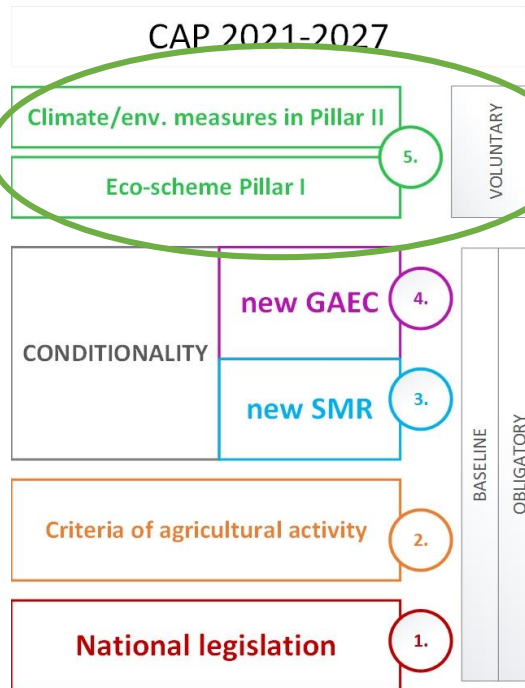
- Compatibility with needs identified via situation analysis and SWOT;
- Multifunctionality (contributes to more than one objective);
- Cost-benefit (costs vs. delivery towards objectives);
- Level of interest to participate (critical mass);



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Architecture of climate and environment interventions

Voluntary commitments for practices going beyond mandatory requirements



INVESTMENTS & KNOWLEDGE TRANSFER

OBJECTIVE

To stimulate use of sustainable farming practices contributing to climate/ environmental objectives

Targeted tools to solve problems in the context of SWOT:

- Reduction of GHG emissions;
- Reduction of ammonia emissions;

Possible interventions

Needs/Objectives

Climate - GHG	Air [Ammonia]	Water	Soil	Biodiversity	Landscape	Food quality
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Eco-schemes (Pillar I)

<p>Set of «greening» activities - for reducing GHG emissions, pollution, improving soils etc. – 5% (in addition to 5% under GAEC 9) of the arable land is managed without plant protection products and used for:</p> <ul style="list-style-type: none"> - Nitrogen fixing crops; - Catch crops; - Under-sowing grass; - Green fallow; 	2		2	2	1	1	1
<p>[4 m] wide green buffer strips (beyond conditionality system requirements):</p> <ul style="list-style-type: none"> - Field margins; - Buffer strips along water objects; - Strips dividing large parcels >100 ha; - Safety strips between organic and conventional parcels; 			2	2	2	2	1
Facilitation of organic farming practices	1	1	1	1	1	1	1
Less disturbing soil management: reduced tillage, direct sowing, ploughing without flipping of soil;	2		1	1			
<p>Preservation of permanent grasslands in livestock farms:</p> <ul style="list-style-type: none"> - Proportion of grasslands – at least 30%; - Livestock units 0,3-1,0 on eligible ha; - Permanent grassland is not ploughed up at least 5 years in the ha committed. 	1		1	1	2	2	

Possible interventions (except forestry interventions)

Needs/Objectives

Rural development measures (Pillar II)

Possible interventions (except forestry interventions)		Needs/Objectives						
		Climate (GHG)	Air (Ammonia)	Water	Soil	Biodiversity	Landscape	Food quality
Rural development measures (Pillar II)	Maintenance of biodiversity in grasslands (including grasslands in organic farms);	1		2	1	2	2	
	Maintenance of bird habitats – in grasslands;	1		2	1	2	2	
	Emissions reducing crop production – more sustainable management of plant protection products, planning of fertilisation, incl., agrochemical analysis, precise application, direct incorporation, use of certified seeds [15%].	2	2	2	2			1
	Environmentally friendly horticulture - set of requirements facilitating reduction of pollution, more sustainable management of plant protection products, preventive measures to reduce usage of PPP and fertilizers, precision farming.	2		1	2			1
	Emissions reducing animal husbandry: <ul style="list-style-type: none"> Feeding and welfare; Access to pastures/outdoor paddocks; Reduced usage of antimicrobials; Longer grazing periods; 	2	2					2
	Organic farming (including dairy and beef production, and apiculture) – specific requirements to improve soil quality, agrochemical analysis, green manure, nitrogen fixing crops, use of certified seeds;	2	1	2	2	1	1	2
	Structural liming of soil – incl., agrochemical analysis.			2	2			

POSSIBLE TYPES OF INVESTMENTS

- Construction of environ./climate friendly production facilities (e.g., livestock sheds...);
- Facilitation of biogas production;
- Precision technologies, incl., for precision mineral fertiliser application;
- Equipment for separation of slurry;
- Covering of slurry storage facilities;
- Equipment/machinery for direct injection of slurry into soil
- Improving quality of feed – preparation technologies;
- Establishment of perennial crops in arable lands;
- Establishment of perennial crops, short rotation coppice or energy crops in organic soils;
- Afforestation of soils with low fertility;
- Renovation of drainage systems;
- Environmentally friendly drainage systems, e.g, sedimentation ponds, 2-level ditches;
- Establishment of wetlands;
- Regeneration of biotopes.



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...we keep on working!

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